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"We have examined the above Account,* with the vouchers produced, and have found it to be correct; and we find that there is a balance in bank, amounting to £203 18*s.* 3*d.*, sterling, and in the Treasurer's hands, 6*s.* 1½*d.*"

"(Signed,)

"JOSEPH CARSON.

"THOMAS A. LARCOM."

"*March* 15*th,* 1844."

"The Treasurer reports, that there is £1117 10*s.* 10*d.* in 3 per Cent. Consols, and £1643 19*s.* 6*d.* in 3½ per Cent. Stock, the latter known as the Cunningham Fund. He also reports that there are due this 16th March, 1844:

2 Entrance fees, at £5 5*s.* per				£10	10	0
6 Arrears of two years, at £4 4*s.* per				25	4	0
25 Do. one year, . £2 2*s.* per . . .				52	10	0
170 Subscriptions for the past year, now due, at £2 2*s.* per				357	0	0
Balance unappropriated in the Bank of Ireland,	£203	18	3			
Balance in Treasurer's hands, . .	0	6	1½	£204	4	4½
				£649	8	4½

"Signed for JAMES PIM, Jun., *Treasurer.*

"EDWARD CLIBBORN, *Clerk, &c.*"

April 8.

JAMES APJOHN, M. D., Vice-President, in the Chair.

The Marquis of Kildare and William Smith O'Brien, Esq., M. P., were elected Members of the Academy; and

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* Entered in Treasurer's book.

Robert Ball, Esq., was elected Treasurer of the Academy, in the room of James Pim, Jun., Esq., who resigned.

Dr. Apjohn read a paper by Mr. Thomas Knox, "On the Purification and Ventilation of Vessels from bad Air."

In reperusing lately Professor Daniell's interesting researches* "on the spontaneous evolution of sulphuretted hydrogen in the waters of the western coast of Africa and of other localities," a method occurred to me of purifying the cabins of vessels, and the sleeping apartments in houses, which would be as efficacious as Professor Daniell's, without being liable to the objection of having free chlorine always present producing its enervating effects.

The method I propose is this: to have air pumped through tubes extending from the steam engine to the cabins. The extremities of the tubes should dip into vessels containing solutions of chlorine or metallic solutions; the last solution, being of lead, would indicate when the solutions were to be renewed, by the black precipitate of sulphuret of lead. At the further end or top of the cabins there should be corresponding tubes to allow the foul air to be removed; these latter would be unnecessary when there was a fire, the draft being sufficient to remove the foul air.

As we can absorb or destroy all vapours, miasma, &c., this method would apply to all unhealthy regions of the world, and would render habitable parts of the world which at present lie deserted and waste. Sierra Leone would cease to be the grave of Europeans, and the Pontine Marshes would no longer exhibit a ghostlike peasantry.

EXPERIMENTS.

Chambers made of wood, with air-tight windows, having apertures in the sides, into which the tubes would fit, could be made at little expense, and sent to Sierra Leone and the Pontine Marshes; in the latter place the pumps might be worked by water conveyed from the mountains or other cheap motive power.

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* Phil. Mag., July, 1841.

Dr. Apjohn read a paper "On the hygrometric Correction in barometric Formulæ for the Measurements of Heights.

If the atmosphere were of one uniform temperature throughout, destitute of moisture, or in a constant hygrometric condition, and if the intensity of gravity were also constant, it is well known that the difference of the altitude of any two points in the atmosphere would be represented correctly by the formula $\text{D} = m \times \log. \frac{p}{p'}$, m being a constant quantity, and p and p' being the respective pressures at the lower and upper stations, as measured by the barometer, or in any other way. A correction for temperature has been long applied by augmenting or diminishing the approximate height, or $m \times \log. \frac{p}{p'}$, by the amount that a column of air of this length would expand or contract if its temperature were changed from 32° to $\frac{t + \theta}{2}$, t being the temperature of the lower, and θ that of the upper extremity of the ærial column, by which the expression becomes

$$\text{D} = m \times \log. \frac{p}{p'} \times \left(1 + \frac{\frac{t+\theta}{2} - 32}{493}\right).$$

Such is, I believe, a correct account of the present form of the barometric formula, at least when we neglect the correction for variations of gravity, which is, however, in general so small as to be safely negligible. The presence of moisture in the air, or rather its varying amount, must obviously exercise some disturbing effect on this formula; but